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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/816,485 | 04/01/2004 | Yoshihiro Tomita | 10873.1433US01 | 1214 |
| 53148 | 7590 | 08/23/2006 | EXAMINER | |
| HAMRE, SCHUMANN, MUELLER & LARSON P.C. | | | PATEL, ISHWARBHAI B | |
| P.O. BOX 2902-0902 | | | ART UNIT | |
| MINNEAPOLIS, MN 55402 | | | PAPER NUMBER | |
| | | | 2841 | |

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/816,485

Applicant(s)

TOMITA ET AL.

Examiner

Ishwar (I. B.) Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 8-25 is/are pending in the application.
- 4a) Of the above claim(s) 8-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment filed on June 13, 2006.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Argyrakis (US Patent No. 5,573,109).

Regarding claim 1, Argyrakis, in figure 1, discloses a wiring board, comprising: a plurality of conductive layers (12, 14, 16) each including one wiring for transmitting signals (one of the single conductors on the conductive layers, column 2, line 35-37); and a plurality of insulation layers (26, 27, 28, 29, 30) for insulating the respective conductive layers; wherein the conductive layers and the insulation layers are laminated alternately (see figure), and each of the plurality of conductive layers is provided with a terminal at least one of first and second ends (terminals at the ends of the wiring of the conductive layer, see figure) of the conductive layers, wherein the terminals are formed stepwise and separated by the insulation layers in a cross-sectional shape of a lamination structure of the conductive layers and the insulation layers (see figure), and each of the conductive layers has a same width as a width of the insulation layer

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immediately underneath thereof (each of the conductive layers forming the wirings has the same width as a width of the insulation layer immediately underneath (see figure).

Regarding claim 2, Argyrakis discloses all the features of the claimed invention as applied to claim 1 above. The conductive layers and the insulation layers are formed in an atmosphere at a reduced pressure below the atmospheric pressure is a process limitation in a product claim. Such a process limitation defines the claimed invention over the prior art to the degree that it defines the product itself. A process limitation cannot serve to patentably distinguish the product over the prior art, in the case that the product is same as, or obvious over the prior art. See Product-by-Process in MPEP § 2113 and 2173.05(p) and *In re Thorpe*, 777 F.2d 695, 227 USPQ 964, 966 (Fed. Cir. 1985). This is structural claim. Argyrakis discloses the structure. Therefore, Argyrakis meets the limitation.

Regarding claim 3, Argyrakis further discloses the plurality of conductive layers are three thin film conductive layers (12, 14, 16).

Regarding claim 25, Argyrakis further discloses a pair of shield layers that sandwiches one of the conductive layers in a lamination direction (layer 18 and 22 sandwich one of the conductive layer 12, see figure).

4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnston (US Patent No. 3,882,265).

Regarding claim 1, Johnston, in figure 2, a plurality of conductive layers (14, 16 and 18) each including one wiring for transmitting signals; and a plurality of insulation layers (22, column 3, line 8-11) for insulating the respective conductive layers; wherein the conductive layers and the insulation layers are laminated alternately (see figure), and each of the plurality of conductive layers is provided with a terminal at least one of first and second ends (14b, 16b and 18b) of the conductive layers, wherein the terminals are formed stepwise and separated by the insulation layers in a cross-sectional shape of a lamination structure of the conductive layers and the insulation layers (see figure), and each of the conductive layers has a same width as a width of the insulation layer immediately underneath thereof (as the insulation layer is thin, the width of the insulation layer is considered as same as that of the conductive layer).

Regarding claim 2, Johnston discloses all the features of the claimed invention as applied to claim 1 above. The conductive layers and the insulation layers are formed in an atmosphere at a reduced pressure below the atmospheric pressure is a process limitation in a product claim. Such a process limitation defines the claimed invention over the prior art to the degree that it defines the product itself. A process limitation cannot serve to patentably distinguish the product over the prior art, in the case that the product is same as, or obvious over the prior art. See Product-by-Process in MPEP § 2113 and 2173.05(p) and *In re Thorpe*, 777 F.2d 695, 227 USPQ 964, 966 (Fed. Cir.

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1985). This is structural claim. Johnston discloses the structure. Therefore, Johnston meets the limitation.

Regarding claim 3, Johnston further discloses the plurality of conductive layers are three thin film conductive layers (14, 16 and 18).

Response to Arguments

5. Applicant's arguments with respect to claims 1-3 and 25 have been considered but are moot in view of the new ground(s) / new explanation of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ishwar (I. B.) Patel whose telephone number is (571) 272 1933. The examiner can normally be reached on M-F (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272 1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ibp
August 19, 2006


ISHWAR PATEL
PRIMARY EXAMINER